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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known

Application Number 10/042,780

Filing Date January 8, 2002

First Named Inventor Vandenameele-Lepla, Patrick

Art Unit 2631

Examiner Name Not Yet Assigned

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et 1 of 2

U.S. PATENT DOCUMENTS								
PART		Document Number						
Examiner	Cite No. ¹	Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
L W	AA	US-5,228,062	07/13/1993	Bingham				
w	AB	US-5,282,222	01/25/1994	Fattouche et al.	RECEIVED			
W.	AC	US-5,450,456	09/12/1995	Mueller				
Lin	AD	US-5,487,069	01/23/1996	O'Sullivan et al.	JUN 1 8 2002			

rechnology Center 2600 OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Cite item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue Examiner T 2 Initiats * No. number(s), publisher, city and/or country where published. BEEK et al., "ML Estimation of Time and Frequency Offset in OFDM Systems," IEEE Trans. on Signal Processing, ΑE Vol. 45, No. 7, pp.1800-1805, (July 1997) BOELCSKEI, "Blind estimation of symbol Timing and Carrier Frequency Offset in Pulse Shaping OFDM Systems," AF Proc. of IEEE Int. Conf. on Acoustics, Speech and Signal Processing, pp. 2749-2752, Phoenix, AZ, (March 1999) CHANG et al., "A New Estimation Scheme For Frequency and Timing Offsets in OFDM Systems," Proc. of the IEEE AG Vehicular Technology Conference, pp. 1832-1835, Boston, MA, (September 2000) CLASSEN et al., "Frequency Synchronization Algorithms for OFDM Systems suitable for Communication over Frequency-Selective Fading Channels," Proc. of The IEEE Vehicular Technology Conference, pp. 1655-1659, Stockholm, Sweden, (June 1994) GUNTHER et al., "A New Approach for Symbol Frame Synchronization and Carrier Frequency Estimation in OFDM Communications." Proc. of The IEEE Int. Conf. on Acoustics, Speech and Signal Processing, pp. 2725-2728, AI Phoenix, AZ, (March 1999) HWANG et al., "Frequency and Timing Period Offset Estimation Technique for OFDM Systems," Electronics Letters, Vol. 34, No. 6, pp. 520-521, (March 19, 1998) JIN et al., "The Estimation of Time Delay and Doppler Stretch of Wideband Signals," IEEE Trans. on Signal ΔK Processing, Vol. 43, No. 4, pp. 904-916, (April 1995) KANG et al., "Decision-directed maximum likelihood estimation of OFDM frame synchronization offset," Electronics Letters, Vol. 30, No. 25, pp. 2153-2154, (December 8, 1994) LAMBRETTE et al., *OFDM Burst Frequency Synchronization by Single Carrier Training Data,* IEEE AM Communications Letters, Vol. 1, No. 2, pp. 46-48, (March 1997) LIM et al., "An Efficient Carrier Frequency Offset Estimation Scheme for an OFDM System," Proc. of the IEEE AN Vehicular Technology Conference, pp. 2453-2457, Boston, MA, (September 2000) LUISE et al., "Carrier Frequency Acquisition and Tracking for OFDM Systems," IEEE Trans. on Communications, AO Vol. 44 No. 11, pp. 1590-1598, (November 1996)

Examiner Signature Date Considered 4/28/05	
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STATEMENT BY APPLICANT

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Sheet 2 of 2 Attorney Docket Number 020798-002100US

OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, senal, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	EC	EIVEC
W	ΑР		UN 1	8 2002
W	AQ	POLLET et al., "Synchronization with DMT Modulation," IEEE Communications Magazine, pp. 80-88, (April 19 PC)	ology	Center 26
Ŋ	AR	RINNE et al., "An Equalization Method for Orthogonal Frequency Division Multiplexing Systems in Channels with Multipath Propagation, Frequency Offset and Phase Noise," IEEE, pp. 1442-1448, (1998)		
W	AS	SCHMIDL et al., "Blind synchronisaation for OFDM," Electronics Letters, Vol. 33, No. 2, pp. 113-114, (January 16, 1997)		ı
W	AT	SIMOENS et al., "A New Method for Joint Cancellation of Clock and Carrier Frequency Offsets in OFDM receivers over Frequency Selective Channels," 2000 IEEE 51 st Vehicular Technology Conference Proceedings, pp. 390-394, Tokyo, JAPAN, (May 2000)		
W	·AU	TURELI et al., "Blind Carrier Synchronization and Channel Identification for OFDM Communications," Proc. of IEEE Int. Conf. on Acoustics, Speech and Signal Processing, pp. 3509-3512, Seattle, WA, (May 1998)		
W	AV	VISSER et al., "A Novel Method for Blind Frequency Offset Correction in an OFDM System," Proc. of the IEEE PIMRC, pp. 816-820, Boston, MA, (September 1998)		,
IW	'AW	WEI et al., "Synchronization Requirement for Multi-user OFDM on Satellite Mobile and Two-path Rayleigh Fading Channels," IEEE Trans. on Communications, Vol. 43, No. 2, pp. 887-895, (February 1995)		

Examiner Signature	Date Considered	4/28/05

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